

## ON THE ECHINI OF AUSTRALIA.

Supplemental Note to the Paper on the above subject.

By the REV. J. E. TENISON-WOODS, F.G.S., &c.

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Since my paper on the Echini of Australia was in type I have found some additions to our fauna in this department, which I note in the following list.

TEMNOPLEURUS TORUEMATICUS, *Klein.*

This species is found in all the Australian seas, temperate as well as tropical, but the extratropical specimens are small. Prof. Tate has sent me specimens from St. Vincent's Gulf (near Adelaide) obtained at a depth of two fathoms. It also occurs, though rarely, at Port Lincoln, and generally on the south and south-west coast.

ECHINUS ANGULOSUS, *Agassiz.*

This species is also found near and about Port Adelaide and St. Vincent's Gulf. Sometimes, though very rarely, washed up at Port Fairy, Western Victoria, and Hobson's Bay, Melbourne. It is thus described:—Test small, neat, thin, and compact-looking, very slightly depressed; on median I. space one principal vertical row of somewhat small tubercles, the rest small, irregularly scattered in neither vertical nor horizontal lines, but more closely packed between main row and poriferous zone. Secondaries and milliaries most numerous towards median line. In the A. space the arrangement is similar, median vertical rows composed of small secondaries, scarcely larger than those forming the vertical line in the poriferous zone. The zone itself is broad with one to three indistinct vertical rows of small secondaries. G. ring narrow; two O. plates reach the A. system, which with the O. plates is rather large. Secondaries on G. plate near the anal edge small, and anal plates but little tuberculated. There are three to four much larger A. plates the rest are small, dimi-

nishing in size to the A. opening. Actinal cuts marked, but not deep; spines slender, tipped with violet; shafts all shades between lightest yellow and violet. Diam., 34 to 52; alt., 16 to 28; mil.

HETEROCENTROTUS TRIGONARIUS, *Lamarck*.

I have lately been able to compare specimens of this urchin from the Mauritius, and am now convinced that it does not occur in Australia, and those specimens regarded as such are only varieties of *H. mammillatus*, with slightly angular spines; the true *H. trigonarius* has the spines tapering, much more slender and longer, and are very conspicuously angular, of a dark olive green color, edged with red.

Genus SCHIZASTER, *Agassiz*, 1836.

Test thin, elongate, apex posterior; anterior and posterior pairs of ambulacra differing greatly in size, the odd ambulacrum in a deep groove; petals sunken, divergent, anterior nearly parallel with odd groove; G. pores from two to three; peripetalous fasciole angular, close to petals; a narrow lateral fasciole starting from anterior ambulacra and passing under A. system with elongate triangular swellings; posterior lip of mouth prominent, beaked and curved back.

SCHIZASTER VENTRICOSUS, *Gray*.

Test thin, outline from above broadly elliptical, angular anteriorly; apical system subcentral, posterior with vertex immediately behind on the flat sloping space of medium interambulacra; petals narrowed almost to a point at apex; posterior pair of G. pores large, round; anterior small, forming an irregular square. Posterior petals concave outwardly, anterior arch only at the extremity, lateral ambulacra remarkably broad, the odd one in a deep flat rectangular groove with steep sides, forming a high keel in the median anterior A. space extending nearly from apex to peripetalous fasciole; the latter angular, broad, especially at extremity of anterior petals, re-entering on the median I. spaces; posterior extremity broad,

nearly vertically truncated, flat; A. system small, covered by plates, decreasing uniformly towards opening. Lateral fasciole running obliquely to ambitus from the middle of the anterior ambulacra towards posterior extremity; posterior extremity of actinal plastron lost in rounded posterior edge of test; tuberculation within peripetalous fasciole coarse, closely packed in all the I spaces, except the odd one. Long. 65; lat. 57; alt. 36 millim.

*Habitat*, East Australian coast, generally both within and outside tropics. I have seen a well authenticated specimen from Port Jackson.

SALMACIS BICOLOR, *Agassiz*.

In the list of the Echini of Australia, at p. 161, there is a description of the genus *Salmacis*. At the head of the page the name of *Salmacis bicolor* has been omitted, to which the subsequent description, beginning at the first line, refers.

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The Fishes of Port Darwin.

By WILLIAM MACLEAY, F.L.S.

The collection of Fishes made for me at Port Darwin by Mr. Spalding during the last six months numbers about 120 species. It is interesting not only as regards the new species—21 in number—which it contains, and the many additions which it makes to the Australian Fauna of other previously known species, but also in the light which it throws on the geographical distribution of the Fishes of the Indian and Pacific Oceans. Almost all the species mentioned by Sir John Richardson as having been received from Port Essington nearly 40 years ago, seem to be found also at Port Darwin, and it is evident that the affinity of the Fish Fauna of North-Western Australia is much more to that of the Dutch East Indian Archipelago than to that of Torres Straits and North-Eastern Australia, which partake more of the